

Keystone Symposia: Cell Death Pathways: Apoptosis, Autophagy and Necrosis

(Joint with "Metabolism and Cancer Progression")

Sponsored by Genentech BioOncology

March 12–17, 2010 • Fairmont Hotel Vancouver • Vancouver, British Columbia • Canada

Scientific Organizers: Guido Kroemer, Junying Yuan and Eileen P. White

PROGRAM FACULTY & TALKS

John M. Abrams, University of Texas Southwestern Medical Center, USA

Dying Like Flies: Cell Death Regulatory Networks in Drosophila

Matthew L. Albert, Institut Pasteur, France

The Immunogenicity of Distinct Cell Death Modalities

David W. Andrews, McMaster University, Canada

Mechanisms of Mitochondrial Membrane Permeabilization by Pro-Apoptotic Bcl-2 Family Proteins

Dale E. Bredeesen, Buck Institute for Age Research, USA

A Cell Perspective on Neurodegeneration

Joan S. Brugge^{*,†}, Harvard Medical School, USA

Diversity of Cell Death Pathways in Organogenesis and Oncogenesis

Lewis C. Cantley^{*,†}, Harvard Medical School, USA

Tyrosine Kinases and Tumor Cell Metabolism

Suzanne Cory, Walter and Eliza Hall Institute of Medical Research, Australia

The Bcl-2 Family: An Achilles' Heel for Cancer?

Ana Maria Cuervo, Albert Einstein College of Medicine, USA

Chaperone-Mediated Autophagy in Organismal Aging

Vojo Deretic, University of New Mexico, USA

Autophagy in Host Pathogen Interactions: From Defense and Survival to Cell Death

Vishva M. Dixit, Genentech, Inc., USA

Regulation of Apoptosis by DUBs and IAPs

Gerard I. Evan[†], University of California, San Francisco, USA

Inhibiting Oncogenes for Cancer Therapy

Douglas R. Green^{*,†}, St. Jude Children's Research Hospital, USA

The Mitochondrion: The Weapon Employed in Apoptotic Suicide

Marja Jäättelä[†], Danish Cancer Society, Denmark

The Lysosome: A Novel Therapeutic Target?

Daniel J. Klionsky, University of Michigan, USA

Regulation of Autophagy

Guido Kroemer[†], INSERM, U848, Institut Gustave Roussy, France

Metabolic Signaling in Cancer

Anthony G. Letai, Dana-Farber Cancer Institute, USA

Diagnosing and Exploiting Cancer's Addiction to Blocks in Apoptosis

Hyam I. Levitsky, Johns Hopkins School of Medicine, USA

Therapeutic Cancer Vaccination with Dead Cells

Frank Madeo, University of Graz, Austria

Programmed Cell Death in Yeast: Subroutines, Mechanisms and Purposes

Noboru Mizushima[†], Tokyo Medical and Dental University, Japan

Role of Autophagy in Protein Metabolism

Thomas P. Neufeld, University of Minnesota, USA

Autophagic Pathways in Drosophila: Good or Evil?

Saul H. Rosenberg, Abbott Laboratories, USA

Bcl-2 Family Inhibitors for the Treatment of Cancer

Craig B. Thompson[†], Abramson Family Cancer Center and Research Institute, University of Pennsylvania, USA

Therapeutic Exploitation of Metabolic Differences between Normal and Cancer Cells

Peter Vandenabeele, VIB, Ghent University, Belgium

Necrosis: Signal Transduction and Intercellular Communication

Karen H. Vousden[†], Beatson Institute for Cancer Research, UK

Control of Metabolism by p53

Loren Walensky, Dana-Farber Cancer Institute, USA

Biophysical Exploration of Bcl-2-Like Proteins

Eileen P. White[†], Rutgers University, USA

Autophagy Tumor Suppression by Protein Quality Control

Michael B. Yaffe, Massachusetts Institute of Technology, USA

Mitotic Catastrophe: Mechanisms and Therapeutic Induction

Junying Yuan^{*}, Harvard Medical School, USA

Necroptosis: A Type of Cellular Necrotic Cell Death Mechanism

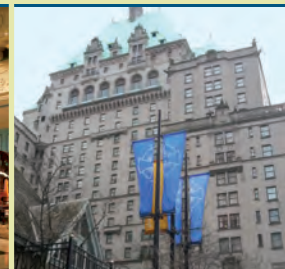
Leigh S. Zawal, Novartis Institutes for BioMedical Research, USA

Modulating Apoptosis as a Therapeutic Strategy for Cancer Treatment

Laurence Zitvogel, Institut Gustave Roussy, France

How Dying Tumor Cells Elicit an Immune Response

*Keynote speaker. †Session chair. ‡Joint speaker. Program subject to change. Current as of October 12, 2009.



Homeostatic and pathological cell death can occur through a multiplicity of different mechanisms including apoptosis, autophagy, necrosis and others. The morphological and functional definitions of distinct cell death modalities are emerging, and the relationships between different lethal pathways are being determined. However, the exact nature of the molecular switches that determine which subroutines cells disintegrate are elusive. Moreover, the relative contributions of different cell death modalities to the avoidance of cancer or degenerative diseases remain to be defined. In cancer, in particular, where defects in cell death are prevalent and the survival of undead cells enables progression and treatment resistance, restoration of cell death pathways is an important and achievable therapeutic goal. Finally, distinct cell death modalities may remain immunologically silent or trigger an immune response, through mechanisms that are still elusive. The 2010 Keystone Symposia meeting on Cell Death Pathways will address the normal regulation and pathogenic dysfunction of distinct cell death modalities, present new strategies for therapeutic cancer cell induction and address the immunogenicity of distinct cell death types.

PROGRAM PLENARY SESSIONS & WORKSHOPS:

- Apoptosis Pathways
- Workshop 1: Methods for the Detection of Non-Apoptotic Cell Death
- Non-Apoptotic Pathways in Model Organisms
- Metabolic Adaptation in Cancer (Joint)
- Autophagic Pathways
- Survival and Death in Development and Disease (Joint)
- Workshop 2: Pathological Implications of Non-Apoptotic Cell Death
- Cell Death Induction for Cancer Therapy
- Non-Conventional Cell Death Pathways
- Immunologic Cell Death

DEADLINES:

Abstract & Scholarship: November 12, 2009

Late-Breaking Abstract: December 10, 2009

Early Registration: January 12, 2010

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